

**STUDY ON MINI – HYDROELECTRIC IN LUNDU DISTRICT
SARAWAK**

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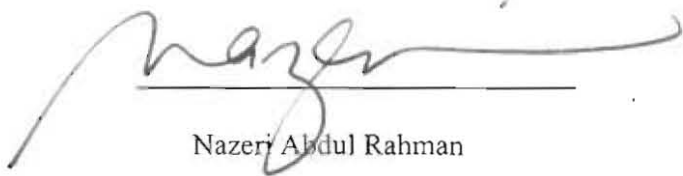
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This report is submitted in partial fulfillment of the requirement for the degree of
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God... .million of thanks for the strength and spirit through my heart

Sama & sindu ku

Thank you for your encouragement, support and patient

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ABSTRACT

This project is based on the feasibility study of the mini-hydroelectric technology with special focus on the mini-hydroelectric in Lundu district, Sarawak. The essence is to determine the required characteristics of Mini-hydroelectric. The main objectives and aspect of this study are to study the electricity generation and the efficiency of the system and to determine whether the mini-hydroelectric projects can fulfil the needs of a developing economy and social. In this study, the problem that occurs in the mini-hydroelectric scheme is identified and some recommendation is included to tackle the arising problems associated with mini-hydroelectric projects and evaluate its effectiveness to the communities. From this study, the problems that faced by all mini-hydroelectric in Lundu, Sarawak are insufficient water, inaccessibility and difficulty in finding spare parts. Mini-hydroelectric has always been an important part of Sarawak electricity supply and the importance of mini-hydroelectric energy will further improved because of its reasonable availability and low environmental impacts. To achieve these objectives, the study was to be undertaken with special reference to the *Gunung Gading, Peninden* and *Sebako mini-hydroelectric* in Lundu, Sarawak.

ABSTRAK

Projek ini ialah kajian mengenai teknologi mini-hidroelektrik dengan merujuk kepada mini-hidroelektrik di daerah Lundu, Sarawak. Tujuan kajian dijalankan ialah untuk menentukan ciri-ciri yang diperlukan oleh mini-hidroelektrik. Objektif utama kajian ini ialah untuk mengkaji penghasilan tenaga elektrik, kecekapan bagi sesuatu mini-hidroelektrik dan juga untuk menentukan samaada projek mini-hidroelektrik dapat memenuhi keperluan tenaga bagi membangunkan ekonomi dan social. Dalam kajian ini, masalah-masalah yang berlaku dalam projek mini-hidroelektrik ditentukan dan beberapa cadangan disertakan bagi mengatasi masalah-masalah yang dihadapi serta menghuraikan keberkesanan projek mini-hidroelektrik kepada masyarakat. Daripada kajian, masalah-masalah yang dihadapi oleh mini-hidroelektrik di daerah Lundu ialah masalah kekurangan air, sukar untuk dihubungi, dan juga kesukaran untuk mendapatkan alat ganti. Mini-hidroelektrik adalah penting dalam pembekalan tenaga elektrik di Sarawak dan kepentingan tenaga hidroelektrik akan meningkat kerana mudah untuk diperolehi dan kesanya terhadap alam sekitar adalah rendah. Bagi mencapai matlamat kajian, kajian ini dijalankan dengan merujuk kepada Mini-hidroelektrik Gunung Gading, Peninden dan Sebako yang terletak di daerah Lundu, Sarawak.

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